



IN THE SPECIFICATION:

Page 1, replace the paragraph starting at line 3 and ending at line 16 with the following paragraph.

The invention relates to a method for continuous measuring of dynamic fluid consumption, particularly of fuel, by means of a continuously-operating flow sensor with variable pressure drop, preferably a mass flow sensor, whereby the pressure beyond the flow sensor is adjusted to a constant value by means of a pressure regulator. The invention addresses furthermore a pressure regulator having a housing, which contains an element biased by a changeable force acting against the ~~force~~ pressure to be regulated whereby ~~the~~ this element is coupled to a valve arrangement that is also arranged in the housing for the pressure fluid ~~to build up of the fluid pressure~~ therein. The invention relates also to a device for continuous measuring of dynamic fluid consumption, particularly of fuel, comprising a tank, possibly a fuel conditioning system, and preferably a controllable pump, a continuously-operating flow sensor for the fluid, preferably a Coriolis sensor, and a initial-pressure regulator for the admission pressure between the flow sensor and the fluid consumer.

Page 1, replace the paragraph starting at line 18 and ending at line 30 with the following paragraph.

Intermittently operating systems based on scales are known in the art for measuring consumption of fluids, especially in the application of fuel consumption of engines on test benches. They have the advantage

of being open systems, namely they have the characteristic whereby fuel can be delivered from the measuring system and returned to the system at ~~intervals limited by the delivery volume~~ limited time-intervals and limited volume. The dispensed amount of fuel as well as the returned fuel amount are measured and taken into account in the consumption reading. Open systems are advantageous especially ~~in~~ for modern injection systems since they force fuel back at the start of the engine during the pressure buildup, within limitations limited volume, into the fuel supply system ~~—ultimately into the tank in case of motor vehicles~~ this volume is drawn back to the vehicles tank ~~—at the start of the engine during the pressure buildup in the injection system~~. Such scales have been shown to be of disadvantage in that they have to be always refilled and a continuous measuring process is not possible thereby.

Page 3, replace the paragraph starting at line 15 and ending at line 19 with the following paragraph.

~~It~~ To protect the system against any danger of damage through undue pressure increase, it is advantageously proposed according to the invention that an additional volume of fluid exceeding the maximum volume that can be moved into the pressure regulator, ~~created by creating~~ pressure increase, is diverted ~~after exceeding the maximum volume that can be moved into the pressure regulator to protect the system against any danger of damage through undue pressure increase.~~

Page 4, replace the paragraph starting at line 14 and ending at line 19 with the following paragraph.

If in an advantageous embodiment of the pressure regulator, the safety valve is closed by a sealing element, which is biased in the closing direction with its compressed air ~~is biased in the closing direction with at~~ the same pressure as the one in the catch volume, then automatic adjustment of the safety valve relative to the set system pressure occurs, which means, secure locking in the closed position of the valve in the range of the normally adjustable volume changes ~~of the safety valve relative to the set system pressure~~.

Page 5, replace the paragraphs starting at line 13 and ending at line 25 with the following paragraph.

Fuel is delivered from the tank 2 by means of a preferably adjustable fuel pump via a line B to the continuously operating flow sensor 7, preferably a Coriolis sensor. The fuel subsequently reaches the delivery point via an electropneumatically operable ~~cutoff~~ shutoff valve 8 in line B onto which the engine is connected as consumer (not illustrated) and on which delivery point the fuel is to be available under a specific present pressure.

A pressure regulator 9 is inserted behind the ~~cutoff~~ shutoff valve 8, which adjusts the pressure in line B behind the flow sensor 7 corresponding to an adjustable preset value whereby the pressure is the delivery pressure to the consumer. As it is explained in the following, especially with respect to Fig. 3, the pressure regulator is able to take on a specific amount of fluid which is returned by the consumer through line

Serial No.: 10/804,234
Docket No.: 66374-151-7
August 2, 2004

B or it is able to accommodate an increase in volume which is caused by the temperature-related expansion of the fluid in the system.